

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): An image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images, the image change detecting apparatus comprising:

a dispersion value detecting device for detecting each of intra-field dispersion value in each field image;

an average direct current level detecting device for detecting each of intra-field average direct current levels in each field image; and

a detecting device for detecting whether or not the fade change occurs based on a change of the detected intra-field dispersion value and a change of the detected intra-field average direct current level,

wherein the intra-field dispersion value is a difference between luminance in each pixel contained in each of at least two field images configuring one frame image and an average value of the luminance in the each of at least two field images.

Claim 2 (Previously Presented): The image change detecting apparatus according to claim 1, wherein the detecting device detects that the fade change occurs in the plurality of the continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level change linearly relevant to a plurality of the continuous field images.

Claim 3 (Original): The image change detecting apparatus according to claim 1, wherein the detecting device detects that the fade change from the field images of single white color occurs in the plurality of the continuous field images when the detected intra-field dispersion value has a positive gradient and changes linearly, and when the detected intra-field average direct current level has a negative gradient and changes linearly, relevant to the plurality of the continuous field images.

Claim 4 (Original): The image change detecting apparatus according to claim 2, wherein the detecting device detects that the fade change from the field images of single white color occurs in the plurality of the continuous field images when the detected intra-field dispersion value has a positive gradient and changes linearly, and when the detected intra-field average direct current level has a negative gradient and changes linearly, relevant to the plurality of the continuous field images.

Claim 5 (Previously Presented): The image change detecting apparatus according to claim 1, wherein the detecting device detects that the fade change from the field images of single black color occurs in the plurality of the continuous field images relevant to the plurality of the continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level each has a positive gradient and changes linearly.

Claim 6 (Previously Presented): The image change detecting apparatus according to claim 2, wherein the detecting device detects that the fade change from the field images of single black color occurs in the plurality of the continuous field images relevant to the plurality of the

continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level each has a positive gradient and changes linearly.

Claim 7 (Currently Amended): An image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images,

the image change detecting apparatus comprising:

a dispersion value detecting device for detecting each of intra-field dispersion value in each field image;

an average direct current level detecting device for detecting each of intra-field average direct current levels in each field image; and

a detecting device for detecting whether or not the fade change occurs based on a change of the detected intra-field dispersion value and a change of the detected intra-field average direct current level,

the image encoding apparatus further comprising:

an encoding device for changing an encoding parameter in encoding of the detected subsequent image information, thereby encoding the image, when it is detected that the fade change occurs,

wherein the intra-field dispersion value is a difference between luminance in each pixel contained in each of at least two field images configuring one frame image and an average value of the luminance in the each of at least two field images.

Claim 8 (Previously Presented): The image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images according to claim 7, wherein the detecting device detects that the fade change occurs in the plurality of the continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level change linearly relevant to a plurality of the continuous field images.

Claim 9 (Original): The image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images according to claim 7, wherein the detecting device detects that the fade change from the field images of single white color occurs in the plurality of the continuous field images when the detected intra-field dispersion value has a positive gradient and changes linearly, and when the detected intra-field average direct current level has a negative gradient and changes linearly, relevant to the plurality of the continuous field images.

Claim 10 (Original): The image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images according to claim 8, wherein the detecting device detects that the fade change from the field images of single white color occurs in the plurality of the continuous field images when the detected intra-field dispersion value has a positive gradient and changes linearly, and when the detected intra-field average direct current level has a negative gradient and changes linearly, relevant to the plurality of the continuous field images.

Claim 11 (Original): The image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images according to claim 7, wherein the detecting device detects that the fade change from the field images of single black color occurs in the plurality of the continuous field images relevant to the plurality of the continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level each have a positive gradient and changes linearly.

Claim 12 (Previously Presented): The image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images according to claim 8, wherein the detecting device detects that the fade change from the field images of single black color occurs in the plurality of the continuous field images relevant to the plurality of the continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level each has a positive gradient and changes linearly.

Claim 13 (Currently Amended): An image change detecting method for detecting an occurrence of a fade change in image information containing a plurality of field images, the image change detecting method comprising the processes of:

detecting each of the intra-field dispersion values in each field image;

detecting each of the intra-field average direct current level in each field image; and

detecting an occurrence of the fade change based on a change of the detected intra-field dispersion value and a change of the detected intra-field average direct current level,

wherein the intra-field dispersion value is a difference between luminance in each pixel contained in each of at least two field images configuring one frame image and an average value of the luminance in the each of at least two field images.

Claim 14 (Original): The image change detecting method according to claim 13, wherein the process of detecting each of the intra-field dispersion values detects that the fade change occurs in a plurality of the continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level change linearly relevant to the plurality of the continuous field images.

Claim 15 (Currently Amended): An information recording medium in which an image change detecting program is readably recorded by a computer included in an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images, the image change detecting program causing the computer to function as:

a dispersion value detecting device for detecting each of the intra-field dispersion values in each field image;

an average direct current level detecting device for detecting each of the intra-field average direct current levels in each field image; and

a detecting device for detecting an occurrence of the fade change based on a change of the detected intra-field dispersion value and a change of the detected intra-field average direct current level,

wherein the intra-field dispersion value is a difference between luminance in each pixel contained in each of at least two field images configuring one frame image and an average value of the luminance in the each of at least two field images.

Claim 16 (Previously Presented): The information recording medium according to claim 15, wherein the image change detecting program is readably recorded by the computer, the image change detecting program causing the computer to further function as:

the detecting device detects that the fade change occurs in the plurality of continuous field images when the detected intra-field dispersion value and the detected intra-field average direct current level change linearly relevant to a plurality of the continuous field images.

Claim 17 (Canceled).

Claim 18 (Previously Presented): The image change detecting apparatus according to claim 1, wherein the intra-field dispersion value has a linear behavior.

Claim 19 (Canceled):

Claim 20 (Previously Presented): The image encoding apparatus including an image change detecting apparatus for detecting generation of a fade change in image information containing a plurality of field images according to claim 7, wherein the intra-field dispersion value has a linear behavior.

Claim 21 (Canceled).

Claim 22 (Previously Presented): The image change detecting method according to claim 13, wherein the intra-field dispersion value has a linear behavior.

Claim 23 (Canceled):

Claim 24 (Previously Presented): The information recording medium according to claim 15, wherein the intra-field dispersion value has a linear behavior.